

REMARKS

The present invention relates to a specific three component curable composition, as defined in claim 1, discussed in more detail below.

In the Office Action of October 6, 2006, claims 1 - 4 and 7 - 20 were rejected under 35 U.S.C. § 102(b) based on Hasegawa et al (GB 2 303 632 A), and claims 5 and 6 were rejected under 35 U.S.C. § 103(a) based on Hasegawa et al in view of Tsuda et al (U.S. Patent 6,541,552 B1). There were no other rejections.

Applicant respectfully traverse the rejections, for the reasons set forth below.

With respect to 35 U.S.C. §102(b)

The present invention relates to a curable composition which comprises the following components (A), (B) and (C):

Component (A): A polyoxyalkylene polymer containing at least one reactive silyl group at a molecular chain terminus;

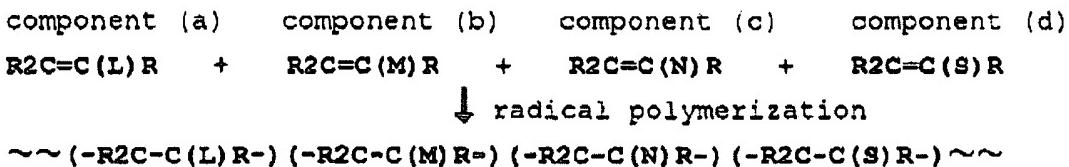
Component (B): A polymer composed of acrylic acid alkyl ester monomer units and/or methacrylic acid alkyl ester monomer units containing, on the average, at least one reactive silyl group in each molecule;

Component (C): An ionic surfactant.

On the other hand, Hasegawa relates to a curable emulsion prepared by copolymerizing the following radical-polymerizable components (a) to (d) in the presence of a pH buffering agent in an aqueous medium:

- (a) an alkoxysilane containing a radical-polymerizable group;
- (b) a vinyl monomer copolymerizable with component (a);
- (c) a polyester or a polyalkylene oxide; and
- (d) a radical-polymerizable anionic or cationic surfactant represented by the general formula: Z-(AO)_n-Y (I).

In Hasegawa, each of the components (a), (b), (c) and (d) is a compound having a radical-polymerizable group (a radical-polymerizable carbon-carbon double bond). This is clear from the description in Hasegawa's specification. Therefore, the curable emulsion of Hasegawa comprises a random vinyl copolymer comprising the components (a) to (d) as follows.



In the above formulas, (L) to (S) represent as follows.

- (L): a part containing a reactive silyl group (except C=C) in the component (a)
- (M): a part except C=C in the component (b)
- (N): a part containing a polyester or a polyalkylene oxide (except C=C) in the component (c)

(S): a part except C=C in the component (d)

In the present invention, the curable composition can be obtained by mixing the components (A), (B) and (C). These components are represented as follows. (-SiX: reactive silyl group)

Component (A): XSi - polyoxyalkylene chain-SiX

Component (B): ~ ~(-R₂C-C(L)R-)(-R₂C-C(M)R-)~ ~

Component (C): an ionic surfactant

As noted above, the component (B) of the present invention may be the same as a copolymer obtained by polymerizing only components (a) and (b) in Hasegawa. The component (B) of the present invention does not contain the components (c) and (d) in Hasegawa. Moreover, Hasegawa does not disclose the component (A) of the present invention. Furthermore, in the curable composition of the present invention, the ionic surfactant of the component (C) is not copolymerized with other components, and the ionic surfactant itself is present in the composition.

Accordingly, the curable composition of the present invention comprising the components (A), (B) and (C) differs from the curable emulsion of Hasegawa prepared by copolymerizing the components (a) to (d). Consequently, the present invention is different from Hasegawa, and is novel.

With respect to 35 U.S.C. §. 103(a)

As mentioned above, the curable composition of the present invention differs from the curable emulsion of Hasegawa. In addition, the curable composition of the present invention has excellent effects of inhibiting dust/dirt adhesion and of hardly allowing traces of rain and like stains to leave thereon. On the other hand, Hasegawa describes that the curable emulsion has storage stability and can form a film having acid resistance and weather resistance. Thus, the effects of the present invention also differ from those of Hasegawa.

Moreover, the Examiner mentions that Tsuda discloses use of a fluorine-containing surfactant. However, Tsuda relates to an aqueous-dispersing composition of synthetic resin, which comprises an aqueous dispersion of synthetic resin and a condensate of tetrafunctional silicate compound (I). Tsuda only describes that by using a fluorine-containing resin as the synthetic resin and a fluorine-containing surfactant as an emulsifier, an aqueous dispersion of the fluorine-containing resin is prepared by emulsion polymerization. Furthermore, Tsuda describes that a property for preventing adherence of stains and weather resistance can be provided by using the condensate of tetrafunctional silicate compound (I), which is not contained in either of the present invention or Hasegawa.

Thus, Tsuda is totally different from the present invention. In addition, Tsuda totally differs from Hasegawa, too. Therefore, one skilled in the art would not have been motivated to combine Hasegawa and Tsuda. Still further, even if Hasegawa and Tsuda are combined, one

RESPONSE UNDER 37 C.F.R. § 1.111
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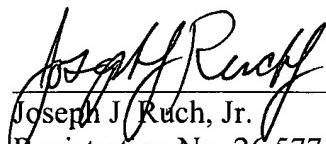
skilled in the art would have had no basis for expecting the excellent effects of inhibiting adhesion of dust/dirt and rain and like stains that are obtained by the specific constitution of the present invention. Accordingly, the present invention is unobvious from the combination of the references.

In view of the above, reconsideration and allowance of claims 1 - 20 of this application are now believed to be in order, and such actions are hereby earnestly solicited.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the local Washington, D.C. telephone number listed below.

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